



Rebecca J. Dulin  
Senior Counsel

Duke Energy  
1201 Main Street  
Capital Center Building  
Suite 1180  
Columbia, SC 29201

o: 803.988.7130  
f: 803.988.7123  
Rebecca.Dulin@duke-energy.com

September 27, 2018

**VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd  
Chief Clerk/Administrator  
Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance  
Report  
Docket No. 2006-224-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of August 2018.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803.988.7130.

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff  
Mr. Jeffrey M. Nelson, Office of Regulatory Staff  
Ms. Nanette Edwards, Office of Regulatory Staff  
Michael Seaman-Huynh, Office of Regulatory Staff  
Ms. Heather Shirley Smith, Duke Energy  
Mr. Scott Elliott, Elliott & Elliott, P.A.  
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC  
Mr. Gary Walsh, Walsh Consulting, LLC

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

Page 1 of 23

**Period: August, 2018**

<b>Station</b>	<b>Unit</b>	<b>Date of Outage</b>	<b>Duration of Outage</b>	<b>Scheduled / Unscheduled</b>	<b>Cause of Outage</b>	<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
<b>Brunswick</b>	<b>1</b>	<b>None</b>					
	<b>2</b>	<b>None</b>					
<b>Harris</b>	<b>1</b>	<b>None</b>					
<b>Robinson</b>	<b>2</b>	<b>None</b>					

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
August 2018**

**Lee Energy Complex**

No Outages at Baseload Units During the Month.

**Richmond County Station**

No Outages at Baseload Units During the Month.

**Sutton Energy Complex**

No Outages at Baseload Units During the Month.

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

Page 3 of 23

**August 2018  
Brunswick Nuclear Station**

	<u>Unit 1</u>		<u>Unit 2</u>	
<b>(A) MDC (mW)</b>	<b>938</b>		<b>932</b>	
<b>(B) Period Hours</b>	<b>744</b>		<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>706,474</b>	<b>101.23</b>	<b>680,895</b>	<b>98.20</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>	<b>1,062</b>	<b>0.15</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-8,602</b>	<b>-1.23</b>	<b>11,451</b>	<b>1.65</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>697,872</b>	<b>100.00%</b>	<b>693,408</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>		<b>99.85</b>
<b>(L) Output Factor (%)</b>		<b>101.23</b>		<b>98.20</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,513</b>		<b>10,874</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

Page 4 of 23

**August 2018**  
**Harris Nuclear Station**

**Unit 1**

<b>(A) MDC (mW)</b>	<b>932</b>	
<b>(B) Period Hours</b>	<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>723,583</b>	<b>104.35</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-30,175</b>	<b>-4.35</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>693,408</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>
<b>(L) Output Factor (%)</b>		<b>104.35</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,338</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

Page 5 of 23

**August 2018**  
**Robinson Nuclear Station**

**Unit 2**

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>548,396</b>	<b>99.47</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>2,908</b>	<b>0.53</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>551,304</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>99.94</b>
<b>(L) Output Factor (%)</b>		<b>99.47</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,811</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
August 2018**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	744	744	744	744	744
(C) Net Generation (mWh)	127,056	126,243	128,564	276,569	658,432
(D) Capacity Factor (%)	75.90	74.75	75.79	98.08	83.57
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	40,920	42,408	43,152	744	127,224
(H) Scheduled Derates: percent of Period Hrs	24.44	25.11	25.44	0.26	16.15
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	0	237	0	4,663	4,900
(N) Economic Dispatch: percent of Period Hrs	0.00	0.14	0.00	1.65	0.62
(O) Net mWh Possible in Period	167,400	168,888	169,632	281,976	787,896
(P) Equivalent Availability (%)	75.56	74.89	74.56	99.74	83.85
(Q) Output Factor (%)	75.90	74.75	75.79	98.08	83.57
(R) Heat Rate (BTU/NkWh)	8,629	8,701	8,596	5,348	7,258

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
August 2018**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	111,233	111,325	127,395	349,953
(D) Capacity Factor (%)	79.10	79.17	97.85	85.06
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	26,040	26,784	4,464	57,288
(H) Scheduled Derates: percent of Period Hrs	18.52	19.05	3.43	13.92
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	3,343	2,507	0	5,850
(N) Economic Dispatch: percent of Period Hrs	2.38	1.78	0.00	1.42
(O) Net mWh Possible in Period	140,616	140,616	130,200	411,432
(P) Equivalent Availability (%)	81.48	80.95	96.57	86.08
(Q) Output Factor (%)	79.10	79.17	97.85	85.06
(R) Heat Rate (BTU/NkWh)	11,604	11,242	0	7,264

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
August 2018**

**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	127,313	126,466	178,661	432,440
(D) Capacity Factor (%)	79.22	78.69	96.83	85.48
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	31,248	30,504	0	61,752
(H) Scheduled Derates: percent of Period Hrs	19.44	18.98	0.00	12.21
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	2,143	3,734	5,851	11,728
(N) Economic Dispatch: percent of Period Hrs	1.33	2.32	3.17	2.32
(O) Net mWh Possible in Period	160,704	160,704	184,512	505,920
(P) Equivalent Availability (%)	80.56	81.02	100.00	87.79
(Q) Output Factor (%)	79.22	78.69	96.83	85.48
(R) Heat Rate (BTU/NkWh)	11,550	11,577	0	6,786

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
August 2018**

**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	127,045	126,777	168,836	422,658
(D) Capacity Factor (%)	76.23	76.07	83.74	79.01
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	40,176	39,432	3,720	83,328
(H) Scheduled Derates: percent of Period Hrs	24.11	23.66	1.85	15.58
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	0	447	29,068	29,515
(N) Economic Dispatch: percent of Period Hrs	0.00	0.27	14.42	5.52
(O) Net mWh Possible in Period	166,656	166,656	201,624	534,936
(P) Equivalent Availability (%)	75.89	76.34	98.15	84.42
(Q) Output Factor (%)	76.23	76.07	83.74	79.01
(R) Heat Rate (BTU/NkWh)	11,773	11,741	0	7,061

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
August 2018**

**Mayo Station**

**Unit 1**

<b>(A) MDC (mW)</b>	746
<b>(B) Period Hrs</b>	744
<b>(C) Net Generation (mWh)</b>	130,658
<b>(D) Net mWh Possible in Period</b>	555,024
<b>(E) Equivalent Availability (%)</b>	91.49
<b>(F) Output Factor (%)</b>	23.54
<b>(G) Capacity Factor (%)</b>	23.54

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
August 2018**

	<b>Roxboro Station</b>		
	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	673	698	711
<b>(B) Period Hrs</b>	744	744	744
<b>(C) Net Generation (mWh)</b>	200,349	226,734	236,737
<b>(D) Net mWh Possible in Period</b>	500,712	519,312	528,984
<b>(E) Equivalent Availability (%)</b>	97.97	99.43	89.83
<b>(F) Output Factor (%)</b>	46.15	43.66	44.75
<b>(G) Capacity Factor (%)</b>	40.01	43.66	44.75

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

Page 12 of 23

**September 2017 - August 2018**  
**Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>938</b>	<b>932</b>		
<b>(B) Period Hours</b>	<b>8760</b>	<b>8760</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>7,313,192</b>	<b>89.00</b>	<b>7,777,033</b>	<b>95.26</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>733,172</b>	<b>8.92</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>113,316</b>	<b>1.38</b>	<b>44,453</b>	<b>0.54</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>58,391</b>	<b>0.71</b>	<b>144,274</b>	<b>1.77</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-1,191</b>	<b>-0.01</b>	<b>198,560</b>	<b>2.43</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,216,880</b>	<b>100.00%</b>	<b>8,164,320</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>89.01</b>		<b>95.57</b>
<b>(L) Output Factor (%)</b>		<b>98.49</b>		<b>96.97</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,453</b>		<b>10,755</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

Page 13 of 23

**September 2017 - August 2018**  
**Harris Nuclear Station**

**Unit 1**

<b>(A) MDC (mW)</b>	<b>932</b>	
<b>(B) Period Hours</b>	<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>7,337,617</b>	<b>90.00</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>756,318</b>	<b>9.28</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>118,314</b>	<b>1.45</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>146,239</b>	<b>1.79</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-205,884</b>	<b>-2.52</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,152,604</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>87.14</b>
<b>(L) Output Factor (%)</b>		<b>101.19</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,510</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

Page 14 of 23

**September 2017 - August 2018**  
**Robinson Nuclear Station**

**Unit 2**

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>6,595,351</b>	<b>101.61</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>129,922</b>	<b>2.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>24,563</b>	<b>0.38</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-258,676</b>	<b>-3.99</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>6,491,160</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>97.72</b>
<b>(L) Output Factor (%)</b>		<b>103.68</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,362</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September, 2017 through August, 2018**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	224	225	226	379	1,055
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,440,022	1,443,113	1,464,033	2,846,005	7,193,173
(D) Capacity Factor (%)	73.28	73.11	73.84	85.72	77.83
(E) Net mWh Not Generated due to Full Scheduled Outages	109,461	108,516	109,909	132,069	459,954
(F) Scheduled Outages: percent of Period Hrs	5.57	5.50	5.54	3.98	4.98
(G) Net mWh Not Generated due to Partial Scheduled Outages	263,978	271,249	272,318	79,505	887,049
(H) Scheduled Derates: percent of Period Hrs	13.43	13.74	13.74	2.39	9.60
(I) Net mWh Not Generated due to Full Forced Outages	9,577	4,147	3,089	17,030	33,842
(J) Forced Outages: percent of Period Hrs	0.49	0.21	0.16	0.51	0.37
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	10,247	10,247
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.31	0.11
(M) Net mWh Not Generated due to Economic Dispatch	142,104	146,851	133,286	235,184	657,426
(N) Economic Dispatch: percent of Period Hrs	7.23	7.44	6.72	7.08	7.11
(O) Net mWh Possible in Period	1,965,142	1,973,875	1,982,635	3,320,040	9,241,692
(P) Equivalent Availability (%)	80.52	80.57	80.59	92.81	84.95
(Q) Output Factor (%)	78.53	77.93	78.62	90.11	82.62
(R) Heat Rate (BTU/NkWh)	9,060	9,099	9,015	4,472	7,243

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September, 2017 through August, 2018**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,241,594	1,231,456	1,387,798	3,860,848
(D) Capacity Factor (%)	74.99	74.38	90.53	79.70
(E) Net mWh Not Generated due to Full Scheduled Outages	124,472	127,635	116,973	369,080
(F) Scheduled Outages: percent of Period Hrs	7.52	7.71	7.63	7.62
(G) Net mWh Not Generated due to Partial Scheduled Outages	168,235	172,289	30,084	370,609
(H) Scheduled Derates: percent of Period Hrs	10.16	10.41	1.96	7.65
(I) Net mWh Not Generated due to Full Forced Outages	0	1,660	747	2,407
(J) Forced Outages: percent of Period Hrs	0.00	0.10	0.05	0.05
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	121,339	122,600	0	241,337
(N) Economic Dispatch: percent of Period Hrs	7.33	7.40	0.00	4.98
(O) Net mWh Possible in Period	1,655,640	1,655,640	1,533,000	4,844,280
(P) Equivalent Availability (%)	82.32	81.78	90.36	84.68
(Q) Output Factor (%)	81.28	81.13	98.39	86.64
(R) Heat Rate (BTU/NkWh)	11,362	11,141	0	7,207

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September, 2017 through August, 2018**

**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	215	215	248	679
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,406,424	1,428,721	1,871,787	4,706,932
(D) Capacity Factor (%)	74.56	75.74	86.16	79.17
(E) Net mWh Not Generated due to Full Scheduled Outages	179,383	173,853	206,807	560,044
(F) Scheduled Outages: percent of Period Hrs	9.51	9.22	9.52	9.42
(G) Net mWh Not Generated due to Partial Scheduled Outages	193,520	191,403	5,103	390,027
(H) Scheduled Derates: percent of Period Hrs	10.26	10.15	0.23	6.56
(I) Net mWh Not Generated due to Full Forced Outages	16,755	277	0	17,032
(J) Forced Outages: percent of Period Hrs	0.89	0.01	0.00	0.29
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,582	1,582
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.07	0.03
(M) Net mWh Not Generated due to Economic Dispatch	90,220	92,047	87,200	269,467
(N) Economic Dispatch: percent of Period Hrs	4.78	4.88	4.01	4.53
(O) Net mWh Possible in Period	1,886,302	1,886,302	2,172,480	5,945,084
(P) Equivalent Availability (%)	79.34	80.62	90.17	83.71
(Q) Output Factor (%)	83.81	83.52	95.22	87.91
(R) Heat Rate (BTU/NkWh)	11,348	11,343	0	6,834

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September, 2017 through August, 2018**

**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	270	718
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,331,287	1,351,666	1,642,617	4,325,570
(D) Capacity Factor (%)	67.74	68.78	69.54	68.74
(E) Net mWh Not Generated due to Full Scheduled Outages	246,099	211,716	285,601	743,415
(F) Scheduled Outages: percent of Period Hrs	12.52	10.77	12.09	11.81
(G) Net mWh Not Generated due to Partial Scheduled Outages	244,828	234,253	63,244	542,325
(H) Scheduled Derates: percent of Period Hrs	12.46	11.92	2.68	8.62
(I) Net mWh Not Generated due to Full Forced Outages	38	32,347	4,922	37,306
(J) Forced Outages: percent of Period Hrs	0.00	1.65	0.21	0.59
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	15,451	15,451
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.65	0.25
(M) Net mWh Not Generated due to Economic Dispatch	142,918	135,187	350,409	628,514
(N) Economic Dispatch: percent of Period Hrs	7.27	6.88	14.83	9.99
(O) Net mWh Possible in Period	1,965,169	1,965,169	2,362,244	6,292,582
(P) Equivalent Availability (%)	75.00	75.65	84.41	78.73
(Q) Output Factor (%)	78.65	79.38	79.34	79.14
(R) Heat Rate (BTU/NkWh)	11,492	11,419	0	7,105

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Intermediate Power Plant  
Performance Review Plan  
September, 2017 through August, 2018**

**Mayo Station**

<b>Units</b>	<b>Unit 1</b>
(A) MDC (mW)	746
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,482,607
(D) Net mWh Possible in Period	6,534,960
(E) Equivalent Availability (%)	87.67
(F) Output Factor (%)	40.86
(G) Capacity Factor (%)	22.69

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant  
Performance Review Plan  
September, 2017 through August, 2018**

**Roxboro Station**

<b>Units</b>	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	673	698	711
<b>(B) Period Hrs</b>	8,760	8,760	8,760
<b>(C) Net Generation (mWh)</b>	1,838,185	2,108,465	1,541,583
<b>(D) Net mWh Possible in Period</b>	5,895,480	6,114,480	6,228,360
<b>(E) Equivalent Availability (%)</b>	78.65	80.09	52.95
<b>(F) Output Factor (%)</b>	55.10	51.37	57.98
<b>(G) Capacity Factor (%)</b>	31.18	34.48	24.75

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**August, 2018**

Page 21 of 23

<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Brunswick 1	938	0.00	0.00	0.00
Brunswick 2	932	0.00	0.00	0.00
Harris 1	932	0.00	0.00	0.00
Robinson 2	741	0.00	0.00	0.00

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**August 2018**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	0.00	0.00	0.00
Asheville Steam 2	192	202.03	0.00	202.03
Asheville CT 3	185	18.00	0.00	18.00
Asheville CT 4	185	18.00	0.00	18.00
Darlington CT 12	133	43.75	0.00	43.75
Darlington CT 13	133	0.00	0.00	0.00
Lee Energy Complex CC 1A	225	0.00	0.00	0.00
Lee Energy Complex CC 1B	227	0.00	0.00	0.00
Lee Energy Complex CC 1C	228	0.00	0.00	0.00
Lee Energy Complex CC ST1	379	0.00	0.00	0.00
Mayo Steam 1	746	0.00	0.00	0.00
Richmond County CT 1	189	0.00	4.07	4.07
Richmond County CT 2	187	157.53	0.00	157.53
Richmond County CT 3	185	0.00	0.00	0.00
Richmond County CT 4	186	335.93	0.00	335.93
Richmond County CT 6	187	0.00	0.00	0.00
Richmond County CC 7	189	0.00	0.00	0.00
Richmond County CC 8	189	0.00	0.00	0.00
Richmond County CC ST4	175	0.00	0.00	0.00
Richmond County CC 9	216	0.00	0.00	0.00
Richmond County CC 10	216	0.00	0.00	0.00
Richmond County CC ST5	248	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**August 2018**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	0.00	0.00	0.00
Roxboro Steam 2	673	0.00	0.00	0.00
Roxboro Steam 3	698	0.00	0.00	0.00
Roxboro Steam 4	711	0.00	0.00	0.00
Sutton Energy Complex CC 1A	224	0.00	0.00	0.00
Sutton Energy Complex CC 1B	224	0.00	0.00	0.00
Sutton Energy Complex CC ST1	271	0.00	0.00	0.00
Wayne County CT 10	192	0.00	0.00	0.00
Wayne County CT 11	192	0.00	0.00	0.00
Wayne County CT 12	193	0.00	0.00	0.00
Wayne County CT 13	191	0.00	0.00	0.00
Wayne County CT 14	195	0.00	0.00	0.00

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.